

#### PERIODIC REVIEW

**University Preparatory Academy Facility Site ID#: 92885787** 

8000 25<sup>th</sup> Avenue NE, Seattle, Washington

**Northwest Region Office** 

**TOXICS CLEANUP PROGRAM** 

**June 2010** 

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#### 1.0 INTRODUCTION

This document is a review by the Washington State Department of Ecology (Ecology) of post-cleanup Site conditions and monitoring data to ensure that human health and the environment are being protected at the University Preparatory Academy (Site). Cleanup at this Site was implemented under the Model Toxics Control Act (MTCA) regulations, Chapter 173-340 Washington Administrative Code (WAC).

Cleanup activities at this Site were completed under the Voluntary Cleanup Program. The cleanup actions resulted in concentrations of petroleum hydrocarbons, polyaromatic hydrocarbons, and metal remaining at the Site which exceed MTCA cleanup levels. The MTCA cleanup levels for soil are established under WAC 173-340-740. The MTCA cleanup levels for groundwater are established under WAC 173-340-720. WAC 173-340-420 (2) requires that Ecology conduct a periodic review of a Site every five years under the following conditions:

- (a) Whenever the department conducts a cleanup action
- (b) Whenever the department approves a cleanup action under an order, agreed order or consent decree
- (c) Or, as resources permit, whenever the department issues a no further action opinion;
- (d) and one of the following conditions exists:
  - 1. Institutional controls or financial assurance are required as part of the cleanup
  - 2. Where the cleanup level is based on a practical quantitation limit
  - 3. Where, in the department's judgment, modifications to the default equations or assumptions using Site-specific information would significantly increase the concentration of hazardous substances remaining at the Site after cleanup or the uncertainty in the ecological evaluation or the reliability of the cleanup action is such that additional review is necessary to assure long-term protection of human health and the environment.

When evaluating whether human health and the environment are being protected, the factors the department shall consider include [WAC 173-340-420(4)]:

- (a) The effectiveness of ongoing or completed cleanup actions, including the effectiveness of engineered controls and institutional controls in limiting exposure to hazardous substances remaining at the Site;
- (b) New scientific information for individual hazardous substances of mixtures present at the Site:
- (c) New applicable state and federal laws for hazardous substances present at the Site;
- (d) Current and projected Site use;
- (e) Availability and practicability of higher preference technologies; and
- (f) The availability of improved analytical techniques to evaluate compliance with cleanup levels.

The Department shall publish a notice of all periodic reviews in the Site Register and provide an opportunity for public comment.

#### 2.0 SUMMARY OF SITE CONDITIONS

#### 2.1 Site Description and History

The University Preparatory Academy (UPA) is located at 8000 25th Avenue Northeast, Seattle, King County, Washington 98115. The Site is located approximately 1.5 miles northeast of Green Lake in Seattle, Washington. Interstate Highway 5 lies approximately 1 mile to the west and Lake Washington lies approximately 1.5 miles to the east. The Site is located in the northeast ¼ of Section 9; Township 25 North, Range 4 East, Willamette Meridian. The King County tax parcel identification number for the Site is 151380-0010. The Site is located at an elevation of 242 to 255 feet above MSL (USGS 1983). The Site covers approximately 24,000 square feet (0.5 acres). The Site is served by the City of Seattle Public Works Department for storm water, drinking water and sewer services. The UPA campus contained at the time of cleanup four permanent structures and one temporary structure. The four permanent structures are a community building, administrative building, class building, and gymnasium. The community building housed the library, kitchen, and classrooms. The administration building contained offices, meeting rooms, and classrooms. The temporary structure housed the school's music program.

A "Pea Patch", which is owned by the City of Seattle Parks Department, is still located directly north of UPA and the Site. The Site is bounded on the east by the rest of the UPA campus and the Temple Beth Am property. To the south, the Site is confined by NE 80th Street. Just south of NE 80th Street is the Waldo J. Dahl playfield. The field is owned by the Seattle Parks Department. To the west the Site is bordered by 25th Street NE.

Since at least 1925, the Site was part of larger vegetable farm. The farm (which at the time of the cleanup included the Site, the UPA, Temple Beth Am, and the Pea Patch) contained a farmhouse on the eastern portion and another structure along the western property border, just north of the Site. There is some indication that a structure on the west side of the farm may have been used to store produce and for loading for trucks (referred to as a "truck farm"). By 1956, this structure was removed. Historical aerial photographs suggest that the owner/operator of the farm stopped cultivating vegetables at the Site between 1965 or 1970. According to City of Seattle records and historical aerial photographs, the Site was filled between 1972 and 1975. During this period, the City of Seattle issued a permit allowing for the filling and grading of 10,000 cubic yards of fill material at the Site. The fill permits for the Site were issued to Mr. John Currie, as the agent of Mr. Edward Picardo, the former property owner. Around that same time, land north of the Site was converted to a public garden (Pea Patch). In 1979, the southernmost 1/3 of the farm, which includes the Site, was sold by Mr. Picardo to UPA. Construction of portable buildings began at the Site in 1988. Construction of the UPA commons building, which may overlay some of the fill material, began in 1990. In the fall of 2000, the UPA removed temporary structures at the Site. Excavation for construction of the UPA performance hall began in August of 2001.

The possible source(s) of the fill material at the Site was evaluated based on anecdotal evidence and interviews with several knowledgeable persons. According to Mr. David Thorstenson of

Meridian Excavating, the Site was utilized as a dumping area in the early 1970s, Mr. Picardo suggested that the fill may have come from two possible sources: Children's Hospital or from Alia Construction. However, the exact origin of the PCF remains unknown. Based on research, it was Riley's opinion that the PCF encountered on-Site during excavations was not caused by a release of petroleum hydrocarbons on-Site or associated with Site activities or uses following the placement of the fill material. Riley concludes that the fill material already had residual concentrations of petroleum hydrocarbons when it was imported and placed on-Site in the early to mid-1970s.

#### 2.2 Site Investigations and Sample Results

UPA commenced construction in August of 2001 of a performance hall adjacent to the west side of the UPA community building. As part of the construction of the performance hall soil was excavated to a depth of approximately 15 feet below ground surface (bgs) or an approximate elevation of 227 feet above mean sea level (MSL). During construction, petroleum contaminated fill material (PCF) was discovered at the Site. The discovery halted construction and prompted an environmental Site investigation to determine the nature and extent of PCF. On behalf of The Klinkam Company, Inc. (Klinkam), acting on behalf of UPA, The Riley Group, Inc. (Riley) conducted an investigation to assess the nature and extent of PCF.

Prior to conducting the Site investigation, Riley collected four samples at the Site on August 13, 2001. These samples were collected as part of Riley's initial response to the discovery of petroleum hydrocarbons at the Site. The samples were analyzed for diesel and heavy oil range TPHs, volatile organic compounds (VOCs), and polychlorinated biphenyls (PCBs) using Washington State Test Method NWTPH-Dx and EPA Test Methods 8270 and 8082, respectively. Riley dug seven test pits at the Site on August 16, 2001 to assess the nature and extent of PCF. Soil samples were collected from the sidewalls and/or the bottoms of the test pits. Sample elevations ranged from approximately 228 to 232 feet above MSL. The surface elevation of the Site is approximately 242 feet above MSL. The samples were analyzed for diesel and heavy oil range TPHs using Washington State Test Method NWTPH-Dx. Two samples (those with highest TPH concentrations) were also analyzed for VOCs, polyaromatic hydrocarbons (PAHs), PCBs, and metals (arsenic, barium, cadmium, chromium, lead, mercury, selenium, and silver) using EPA Test Methods 8270, 8082 modified, and 6000/7000 series, respectively. The samples were also analyzed for gasoline range TPHs using Washington State Test Method NWTPH-Gx. One sample was analyzed for extractable petroleum hydrocarbons (EPHs) using Washington State Test Method EPH. Samples were analyzed by CCI Laboratories of Everett, Washington.

Based on the results from the Site investigation, Riley determined that historical fill material at the Site contained petroleum hydrocarbons, carcinogenic PAHs, and metals. The fill material consisted of sand, clayey/silt, gravel, bricks, oil filters, piping, asphalt, plastic bags, and concrete debris. This material was underlain by peat and/or a clay/silt deposits. Using results from the Site investigation, Riley developed a remedial action (RA) plan for the Site. The RA was designed to allow construction at the Site to continue in conjunction with the removal and off-Site disposal of PCF. The RA was conducted between August 31 and September 11, 2001.

Site geotechnical boring logs and drilled pier records indicated that groundwater was intercepted at approximately 25 feet bgs (approximate elevation of 217 feet above MSL). Groundwater occurs primarily in the silty gravelly sand. Test pits dug at the Site to depths of approximately 15 feet bgs (approximate elevation of 227 feet above MSL) did not intercept groundwater. The wells nearest the Site were installed at a Shell Station located at the corner of NE 75th Avenue and 25th NE Street. Depth to groundwater at the station is approximately 8.5 feet bgs. Groundwater at the station flows to the northwest.

#### 2.3 Cleanup Actions

The Performance Hall Site is located at the northeast corner of N.E. 80th Street and 25th Avenue N.E., Seattle, Washington. PCF was discovered at the Site after approximately 4,935 tons of PCF were transported and deposited at six residential properties and one industrial property located in the Puget Sound area (Off-Site Locations). Between August and November 2001, UPA, in consultation with the The Riley Group, Inc. (Riley), removed PCF from the Off-Site Locations. In total, approximately 6,854 tons of soil were removed from the Off-Site Locations (including the imported PCF and underlying native soils). Post cleanup concentrations of TPHs remaining at the Off-Site Locations are less than applicable Model Toxics Control Act Method A cleanup levels and/or below laboratory practical quantification limits (PQLs). All remedial activities have been completed at the Off-Site Locations as of the date of this report. Separate reports for Off-Site Locations are available in Ecology files but those locations are not subject to this Periodic Review.

As a result of the discovery of PCF at the Performance Hall, Riley conducted a Site investigation to determine the nature and extent of PCF at the Site. Results from that investigation indicated that diesel and lube oil range total petroleum hydrocarbons (TPHs) and polyaromatic hydrocarbons (PAHs) were present in the fill material at concentrations exceeding the applicable Washington State Model Toxics Control Act (MTCA) Method A soil cleanup levels (WAC 173-340, Table 740-1). The PCF ranged in depth from approximately 4 feet to 15 feet below ground surface (bgs). The fill material consisted of sand, gravel, concrete, asphalt, metal piping, oil filters, and plastic bags. The PCF was underlain by peat and clay/silt deposits. Based on Riley's Phase I Environmental Site Assessment (ESA) performed for the Site, the Site was filled between the early to mid-1970's. Riley's Phase I ESA findings are discussed in a separate report, dated January 23, 2002. The exact source of PCF material is unknown.

Based on results from the investigation, Riley developed a remedial action (RA) plan for the Performance Hall Site that planned for the removal of PCF in conjunction with the construction of the performance hail. In addition, results from that investigation indicated that the contaminants of concern (COC) for the Site were diesel and heavy oil range TPHs and carcinogenic PAHs (cPAHs). During the RA approximately 6,045 tons of Class II and 5,545 tons of Class III PCF were excavated from the Site and disposed at Rinker Materials in Everett, Washington. Once the limits of the construction excavation were reached, Riley collected 41 soil samples to confirm that concentrations of TPHs and cPAHs remaining in-place at the Site were protective of human health and environment. With the exception of PCF located in the northwest

corner of the Site, sample results indicated that concentrations of TPHs and cPAHs were less than the applicable MTCA cleanup levels. Concentrations of cPAHs remaining in the northwest corner of the Site do not pose a risk to human health or the environment because the volume of PCF remaining in-place is minimal and the design of University Preparatory Academy Performance Hall is such that it will cap and isolate the remaining PCF. Field observations from the RA also showed the PCF was underlain by at least 10 feet of uncontaminated peat or clay/silt. Based on soil borings logs from the Site, groundwater underlies the peat and clay/silty. Groundwater was not intercepted during the remedial action (RA).

Ecology issued a 'No Further Action' letter February 25, 2003, after a restrictive covenant was recorded with the county.

#### 2.4 Cleanup Levels

In an effort to develop a MTCA Method B TPH cleanup level for the Site, samples RTP2@3' and EX-37-229 were analyzed for EPHs and PARs. TPH results for these samples were considered to be representative of the type of petroleum products present in the soil at the Site. In addition, these samples contained the highest TPH concentrations discovered at the Site, and therefore potentially posed a threat to human health via direct soil contact and to groundwater quality. The representative samples were identified by evaluating sample chromatograms and concentrations of TPHs in all confirmation soil samples collected during the Site investigation and RA.

The Method B c1eanup level for the Site was established using procedures presented in WAC 173-340-747 of MTCA. Using Ecology's Excel based Workbook (version MTCATPH10) for calculating TPH cleanup levels, the hazard indices (HIs) for the representative samples RTP2@3' and EX-37-229 (7,600 ppm TPH and 4,700 ppm TPH, respectively) were calculated. The HIs were determined using EPH and PAH results for the representative samples. The HIs for the representative samples were calculated as 2.15 (RTP2@3') and 1.52 (EX-37-229). These values exceeded the MTCA Method B residential HI criterion of 1 (WAC 173-340-745); and therefore, are not protective of human health via direct soil contact.

The Workbook was then used to develop concentrations of total EPHs for samples RTP2@3' and EX-37-229 that would be protective of human health (i.e., HIs less than or equal to 1). Riley determined that total EPH concentrations of 2,226 and 2,153 mg/kg, respectively, are protective or human health and groundwater quality. These EPH cleanup values are approximately equivalent to TPH cleanup levels (per Test Method NWTPH-Dx) of 3,100 mg/kg and 3,000 mg/kg, respectively. These TPH values are based on the average factor difference of 1.4 between EPH and TPH results for the representative samples. Based on these results, a Site-specific Method B TPH cleanup level of 3,000 mg/kg, as determined by Test Method NWTPH-Dx, was established for the Site.

MTCA Method B residential soil cleanup standards were used to assess human health risk for cPAHs through direct contact with soil. CPAHs were detected in both representative samples. The calculated risk for cPAHs in sample RTP2@3' was 2.12E-06 (total cPAHs 0.720 mg/kg). The risk for sample EX-37-229 was 6.12E-07 (total CPAHs 0.46 mg/kg). The risk for

representative sample RTP2@3' exceeds the MTCA Method B risk criterion of 1E-06 (WAC 173-340-745). Sample RTP2@3' was excavated during the remedial action, while sample EX-37-229 remains in place. Based on additional CPAH results from samples RTP7@13', EX-35-229, and EX-16-23 1, it appears that there is a relationship between the concentrations of CPAHs and TPHs in soil. As the TPH soil concentrations decrease so does the total concentration of cPAHs. Based on these findings, the soil TPH concentrations is an indicator of the risk posed to human health by cPAHs.

Using Ecology's 4-phase soil to groundwater pathway model as present in WAC 173-340-747 and Ecology's Workbook for calculating TPH cleanup levels, the predicted concentrations of EPHs in the groundwater below the Site was derived. Ecology's default hydrogeologic input parameters were used in the model (WAC 173-340-747). The predicted total EPH groundwater concentrations for the representative samples were 0.215 microgram per liter (ug/l) (RTP2@3') and 0.408 ug/l (EX-37-229). Their concentrations are less than Method TPH Method A groundwater cleanup levels for diesel and heavy oil range TPHs (500 ug/l diesel and 500 ug/l heavy oil; WAC 173-340-720). In addition, the groundwater HI for the representative samples were less than MTCA Method B residential HI criterion of 1 (WAC 173-340-720); and therefore, are protective of human health. The predicted cancer risk in the groundwater from cPAHs found in the representative samples were 2.90E-l0 (RTP@3') and 1.83E-l0 (EX-37-229). The predicted risks are less than MTCA Method B risk criterion (IE-06); and therefore, are protective of human health.

When non-aqueous phase liquid (NAPL), like diesel and lube oil, are released to soil the NAPL collects in the soil pore spaces where it is held by capillary forces. The capturing of the NAPL in soil is called residual saturation. A large accumulation of NAPL in soil can overwhelm the capillary force and cause the NAPL to flow through the soil column. NAPL flowing through the soil column may eventually accumulate on or in the groundwater. According to WAC 173-340(l0)(a) the TPH concentrations in soil remaining at a Site must not lead to the accumulation of NAPL in on or in the groundwater. The Site specific Method B TPH cleanup level (3,000 mg/kg TPHs) exceeds Ecology's residual saturation default screening levels of diesel and motor oil range TPHs (both 2,000 mg/kg) as presented in WAC 173-340-747 (l0)(d)(i). Under WAC-173-340-747 (l0)(c), Ecology allows an empirical demonstration to show that NAPL remaining in the soil is protective of groundwater quality. Based on the following rationale, Riley asserts that the Site-specific Method B cleanup level is protective of groundwater quality as are remaining soil concentrations of TPHs that exceed the Method B cleanup level:

- Peat and clay/silt underlying the PCF fill material were free of petroleum hydrocarbons.
   The fill material had been in-place for at least 30 years, with no NAPL migrating through or into the peat and clay/silt horizon;
- Ecology's residual saturation screening levels are based on capillary forces associated with coarse sand and gravel. Mercer and Cohen (1990) demonstrated that the capillary forces in fine-grained soils (like the clay/silt at the Site) are greater than those of coarse sand and gravel. The authors showed that for diesel and lube oil, residual saturation concentrations in fine-grained soil can vary from 10,000mg/kg to 55,000 mg/kg.

- Therefore, if NAPL remains in the PCF at the Site, its vertical migration would be inhibited by the strong capillary forces within the peat and clay/silt; and
- Borings drilled at the Site and finding from Rileys' RA indicated that there is a buffer of at least 10 to 12 feet of peat and or clay/silt between groundwater and any NAPL that may exist in the PCF.

#### 2.5 Restrictive Covenant

Based on the Site use, surface cover and calculated cleanup levels, it was determined that the Site was eligible for a 'No Further Action' determination if a Restrictive Covenant was recorded for the property. A Restrictive Covenant was recorded for the Site in 2002 which imposed the following limitations:

Section 1. No groundwater may be taken for any use from the Property without prior written approval from Ecology. The Owner shall not alter, modify, or remove the existing Performance Hall in any manner that may result in the release or exposure to the environment of the contaminated soil within the Restricted Zone or create a new exposure pathway without prior written approval from Ecology. The contaminated soil that is not accessible due to the existing Performance Hall will be addressed if the existing Performance Hall is removed in the future. Any activity on the Property that may result in the release or exposure to the environment of the contaminated soil within the Restricted Zone, or create a new exposure pathway, is prohibited. Some examples of activities that are prohibited in the Restricted Zone include: drilling, digging, placement of any objects or use of any equipment which deforms or stresses the surface beyond its load bearing capability, piercing the surface with a rod, spike or similar item, bulldozing, or earthwork.

Section 2. Any activity on the Property that may interfere with the integrity of the Remedial Action and continued protection of human health and the environment is prohibited. Section 3. Any activity on the Property that may result in the release or exposure to the environment of a hazardous substance that remains on the Property as part of the Remedial Action, or creates a new exposure pathway, is prohibited without prior written approval from Ecology.

Section 4. The Owner of the Property must give thirty (30) days advance written notice to Ecology of the Owner's intent to convey any interest in the Property. No conveyance of title, easement, lease, or other interest in the Property shall be consummated by the Owner without adequate and complete provision for continued monitoring, operation, and maintenance of the Remedial Action.

Section 5. The Owner must restrict leases to uses and activities consistent with this Restrictive Covenant and notify all lessees of the restrictions on the use of the Property.

Section 6. The Owner must notify and obtain approval from Ecology prior to any use of the Property that is inconsistent with the terms of this Restrictive Covenant. Ecology may approve any inconsistent use only after public notice and comment.

Section 7. The Owner shall allow authorized representatives of Ecology the right to enter the Property at reasonable times for the purpose of evaluating the Remedial Action: to take samples, to inspect remedial actions conducted at the Property, and to inspect records that are related to the Remedial Action.

Section 8. The Owner of the Property reserves the right under WAC 173-340-440 to record an instrument that provides that this Restrictive Covenant shall no longer limit use of the Property or be of any further force or effect. However, such an instrument may be recorded only if Ecology, after public notice and opportunity for comment, concurs.

The Restrictive Covenant is available as Appendix 6.4.

#### 3.0 PERIODIC REVIEW

#### 3.1 Effectiveness of completed cleanup actions

The Restrictive Covenant for the Site was recorded and is in place. This Restrictive Covenant prohibits activities that will result in the release of contaminants at the Site without Ecology's approval, and prohibits any use of the property that is inconsistent with the Covenant. This Restrictive Covenant serves to ensure the long term integrity of the remedy.

Based upon the Site visit conducted on June 30, 2010, the structure (remedy) at the Site continues to eliminate exposure to contaminated soils by ingestion and contact. The remedy appears in satisfactory condition and no repair, maintenance, or contingency actions have been required. The Site is still operating as a academy. A photo log is available as Appendix 6.5.

Soils with TPH, PAHs, and metals concentrations higher than MTCA cleanup levels are still present at the Site. However, the remedy (Site structure) prevents human exposure to this contamination by ingestion and direct contact with soils. The Restrictive Covenant for the property will ensure that the contamination remaining is contained and controlled.

### 3.2 New scientific information for individual hazardous substances for mixtures present at the Site

There is no new scientific information for the contaminants related to the Site.

## 3.3 New applicable state and federal laws for hazardous substances present at the Site

The cleanup at the Site was governed by Chapter 173-340 WAC. WAC 173-340-702(12) (c) [2001 ed.] provides that,

"A release cleaned up under the cleanup levels determined in (a) or (b) of this subsection shall not be subject to further cleanup action due solely to subsequent amendments to the provision in this chapter on cleanup levels, unless the department determines, on a case-by-case basis, that the previous cleanup action is no longer sufficiently protective of human health and the environment."

Although cleanup levels changed for petroleum hydrocarbon compounds as a result of modifications to MTCA in 2001, contamination remains at the Site above the new MTCA Method A and B cleanup levels. Even so, the cleanup action is still protective of human health and the environment. A table comparing MTCA cleanup levels from 1991 to 2001 is available below.

Analyte	1991 MTCA Method A Soil Cleanup Level (ppm)	2001 MTCA Method A Soil Cleanup Level (ppm)	1991 MTCA Method A Groundwater Cleanup level (ppb)	2001 MTCA Method A Groundwater Cleanup Level (ppb)
Cadmium	2	2	5	5
Lead	250	250	5	15
TPH	NL	NL	1000	NL
TPH-Gas	100	100/30	NL	1000/800
TPH-	200	2000	NL	500
Diesel				
TPH-Oil	200	2000	NL	500

**NL** = **None listed** 

#### 3.4 Current and projected Site use

The Site is currently used for residential/commercial (preparatory academy) purposes. There have been no changes in current or projected future Site or resource uses.

#### 3.5 Availability and practicability of higher preference technologies

The remedy implemented included containment of hazardous substances, and it continues to be protective of human health and the environment. While higher preference cleanup technologies may be available, they are still not practicable at this Site.

## 3.6 Availability of improved analytical techniques to evaluate compliance with cleanup levels

The analytical methods used at the time of the remedial action were capable of detection below selected Site cleanup levels. The presence of improved analytical techniques would not affect decisions or recommendations made for the Site.

#### 4.0 CONCLUSIONS

The following conclusions have been made as a result of this periodic review:

- The cleanup actions completed at the Site appear to be protective of human health and the environment.
- Soils cleanup levels have not been met at the standard point of compliance for the Site; however, the cleanup action has been determined to comply with cleanup standards since the long-term integrity of the containment system is ensured, and the requirements for containment technologies are being met.
- The Restrictive Covenant for the property is in place and continues to be effective in protecting public health and the environment from exposure to hazardous substances and protecting the integrity of the cleanup action.

Based on this periodic review, the Department of Ecology has determined that the requirements of the Restrictive Covenant continue to be met. No additional cleanup actions are required by the property owner. It is the property owner's responsibility to continue to inspect the Site to assure that the integrity of the remedy is maintained.

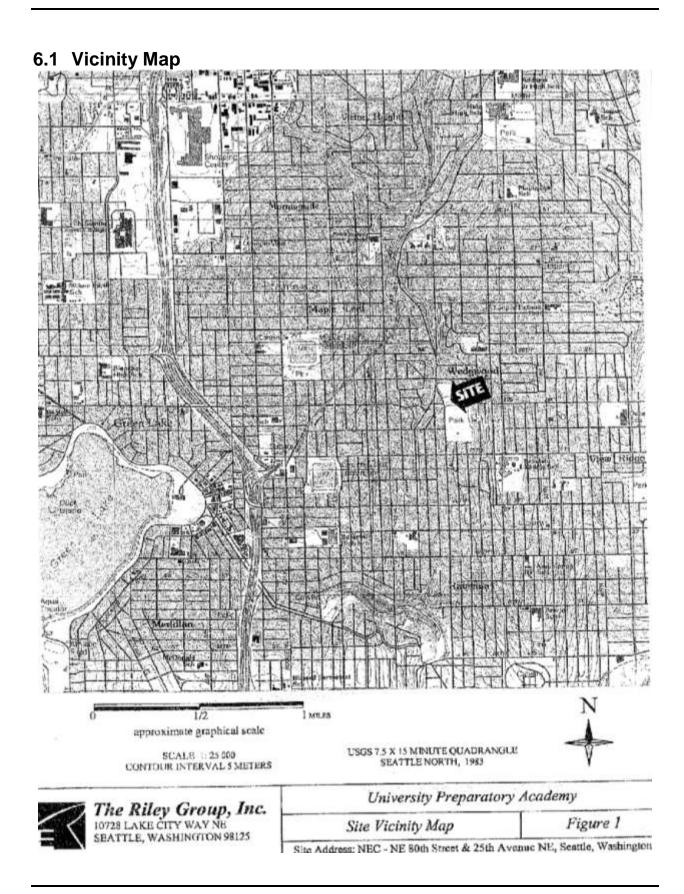
#### 4.1 Next Review

The next review for the Site will be scheduled five years from the date of this periodic review. In the event that additional cleanup actions or institutional controls are required, the next periodic review will be scheduled five years from the completion of those activities.

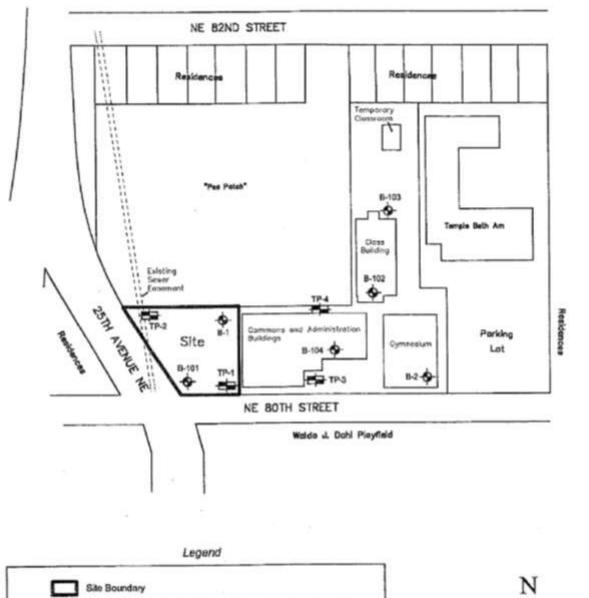
#### 5.0 REFERENCES

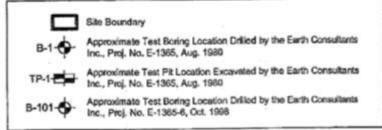
- 1. Independent Remedial Action Report, Modified Phase I Environmental Site Assessment, dated January 23, 2002, by The Riley Group, Inc., received January 25, 2002;
- 2. Independent Remedial Action Report, Remedial Action Cleanup Report, dated January 24, 2002, by The-Riley Group, Inc., received January 25, 2002;
- 3. 2002 Restrictive Covenant;
- 4. Ecology, 2010 Site Visit.

#### 6.0 APPENDICES



#### 6.2 Site Plan









University Preparatory Academy	Figure 3
ECI Test Pit & Boring Location Map	Project No. 2001-133
Site Address: NEC - NE 80th Street & 25th Avenue NE, S	cattle, Washington

# 6.3 TPH-Dx Concentration Map Date Drawn, 1973x Summary of Remodial Excession Results Conformation Soil Sample Location Map University Preparationy Academy NE 80TH STREET 25TH AVENUE NE SOR SAMPLES COLLECTED BY THE ALLEY GROUP, INC. MEWIEST DATES ADDRESS AND SEPTEMBER 11, 300. CONTRIBATION NOL SAMPLE LOCATION COLLECTED AT NOTICE GRADE.

#### **6.4 Environmental Covenant**

CONFORMED COPY

University Preparatory Academy 8000 – 25th Avenue NE Seattle, Washington 98115 Attention: Steven W. Hooper 20021023001678 HCMP PAGE 001 OF 008 RCOVE 27.00 10/23/20087 12:46

#### RESTRICTIVE COVENANT

This Declaration of Restrictive Covenant is made pursuant to RCW 70.105D.030(1)(f) and (g), and WAC 173-340-440 by University Preparatory Academy, its successors and assigns, and the Washington State Department of Ecology, its successors and assigns.

Abbreviated Legal Description: Portion of Parcel A, City of Seattle LBA No. 9904433, as recorded under King County Recording No. 19990907900005.

Legal Description of Property: See Exhibit A.

Tax Parcel I.D. #: 1513800010

#### RESTRICTIVE COVENANT

#### University Preparatory Academy / Performance Hall

This Declaration of Restrictive Covenant is made pursuant to RCW 70.105D.030(1)(f) and (g) and WAC 173-340-440 by University Preparatory Academy, its successors and assigns (hereafter "University Prep"), and the State of Washington Department of Ecology, its successors and assigns (hereafter "Ecology").

#### RECITALS

- A. University Prep is the fee owner of certain real property located at 8000 25<sup>th</sup> Avenue, Seattle, in the County of King, State of Washington (hereafter "Property"), that is subject to this Restrictive Covenant. The legal description of the Property is attached hereto as Exhibit A, which is hereby incorporated by reference, and a diagram of the Property is attached hereto as Exhibit B, which is hereby incorporated by reference. University Prep's Performance Hall (hereafter "Performance Hall") is currently located on the Property.
- B. An independent remedial action (hereafter "Remedial Action") was conducted at the Property between August 2001 and September 2001. During the course of conducting the Remedial Action, representatives of University Prep determined that it was technically infeasible, impracticable, and cost-prohibitive to excavate, remove, or treat certain soils underneath the Property containing petroleum hydrocarbons, carcinogenic polyaromatic hydrocarbons, and chromium in concentrations which exceed the Model Toxics Control Act site-specific Method B Residential Cleanup Level for soil established under WAC 173-340-740. The Remedial Action conducted at the Property is described in the following document:

Remedial Action Cleanup Report
Portion of University Preparatory Academy Property
NE Corner of 25<sup>th</sup> Avenue NE and 80<sup>th</sup> Street
Seattle, Washington
The Riley Group, Inc., dated January 24, 2002

This document is on file at Ecology's Northwest Regional Office.

C. This Restrictive Covenant is required because the Remedial Action resulted in residual concentrations of petroleum hydrocarbons which exceed the Model Toxics Control Act site-specific Method B Residential Cleanup Level for soil established under WAC 173-340-740.

#### TERMS AND CONDITIONS

University Prep makes the following declaration as to limitations, restrictions, and uses to which the Property may be put and specifies that such declarations shall constitute covenants to run with the land, as provided by law and shall be binding on all parties and all persons claiming under them, including all current and future owners of any portion of or interest in the Property (hereafter "Owner").

Section 1. No groundwater may be taken for any use from the Property without prior written approval from Ecology. The Owner shall not alter, modify, or remove the existing Performance Hall in any manner that may result in the release or exposure to the environment of the contaminated soil within the Restricted Zone or create a new exposure pathway without prior written approval from Ecology. The contaminated soil that is not accessible due to the existing Performance Hall will be addressed if the existing Performance Hall is removed in the future. Any activity on the Property that may result in the release or exposure to the environment of the contaminated soil within the Restricted Zone, or create a new exposure pathway, is prohibited. Some examples of activities that are prohibited in the Restricted Zone include: drilling, digging, placement of any objects or use of any equipment which deforms or stresses the surface

beyond its load bearing capability, piercing the surface with a rod, spike or similar item, bulldozing, or earthwork.

Section 2. Any activity on the Property that may interfere with the integrity of the Remedial Action and continued protection of human health and the environment is prohibited.

Section 3. Any activity on the Property that may result in the release or exposure to the environment of a hazardous substance that remains on the Property as part of the Remedial Action, or creates a new exposure pathway, is prohibited without prior written approval from Ecology.

Section 4. The Owner of the Property must give thirty (30) days advance written notice to Ecology of the Owner's intent to convey any interest in the Property. No conveyance of title, easement, lease, or other interest in the Property shall be consummated by the Owner without adequate and complete provision for continued monitoring, operation, and maintenance of the Remedial Action.

Section 5. The Owner must restrict leases to uses and activities consistent with this Restrictive Covenant and notify all lessees of the restrictions on the use of the Property.

Section 6. The Owner must notify and obtain approval from Ecology prior to any use of the Property that is inconsistent with the terms of this Restrictive Covenant. Ecology may approve any inconsistent use only after public notice and comment.

Section 7. The Owner shall allow authorized representatives of Ecology the right to enter the Property at reasonable times for the purpose of evaluating the Remedial Action; to take samples, to inspect remedial actions conducted at the Property, and to inspect records that are related to the Remedial Action.

Section 8. The Owner of the Property reserves the right under WAC 173-340-440 to record an instrument that provides that this Restrictive Covenant shall no longer limit use of the Property or be of any further force or effect. However,

such an instrument may be recorded only if Ecology, after public notice and opportunity for comment, concurs.

Steven W. Hooper, President

10.1.02

[Date Signed]

Jane/Hummer, Secretary

[Date Signed]

STATE OF WASHINGTON

SS

COUNTY OF KING

On this day personally appeared before me Steven W. Hooper, to me known to be the President of University Preparatory Academy, the entity that executed the foregoing instrument, and acknowledged said instrument to be the free and voluntary act and deed of said entity for the uses and purposes therein mentioned, and on oath stated that he was authorized to execute said instrument.

Given under my hand and official seal this / at day of October, 2002.

HOTARY

AUBLIC

Printed Name Richard E. Bangert, II
NOTARY PUBLIC in and for the State of
Washington, residing at Seattle
My commission expires 7-16-03

# STATE OF WASHINGTON SS COUNTY OF KING

On this day personally appeared before me Jane Hummer, to me known to be the Secretary of University Preparatory Academy, the entity that executed the foregoing instrument, and acknowledged said instrument to be the free and voluntary act and deed of said entity for the uses and purposes therein mentioned, and on oath stated that she was authorized to execute said instrument.

July 25, 2002

# LEGAL DESCRIPTION FOR UNIVERSITY PREPARATORY ACADEMY

#### EXHIBIT A

#### RESTRICTIVE COVENANT LEGAL DESCRIPTION

That portion of Parcel A, City of Seattle Lot Boundary Adjustment Number 9904433 as recorded under King County Recording Number 19990907900005, records of King County, Washington lying Westerly of the following described line:

Beginning at the Southwest corner of said Parcel A;

Thence S 88°56'49" E along the South line thereof a distance of 100.11 feet to the True Point of Beginning of the herein described line;

Thence N 01°05'51" E a distance of 72.14 feet;

Thence N 89°26'34" W a distance of 6.38 feet;

Thence N 01°05'30" E a distance of 33.16 feet;

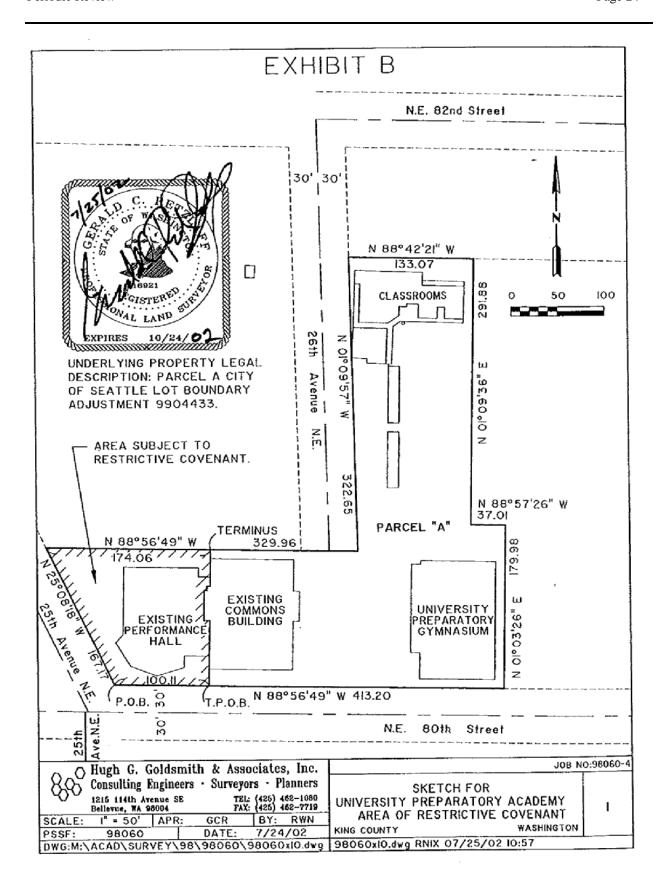
Thence S 89°44'56" E a distance of 2.92 feet;

Thence N 00°38'20" E a distance of 4.51 feet;

Thence S 89°02'33" E a distance of 3.52 feet;

Thence N 01°08'18" E a distance of 40.20 feet to a point on the North line of said Parcel A, distant thereon 174.06 feet East of the Northwest corner thereof, and the terminus of the herein described line.

A98060-4.849



#### 6.5 Photo log

Photo 1: Building constructed over contaminated soil - from the southwest



Photo 2: The building front - farther east on 80<sup>th</sup>, from the south



Photo 3: Building rear adjacent to pea patch - from the northwest





